U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

r the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number 10/666,511

Filing Date September 17, 2003

First Named Inventor RADEMACHER, Thomas

Group Art Unit Unassigned

Examiner Name Unassigned

Attorney Docket Number 1012E-910001US

			ENCLOSURES (check all that ap	ply)		
Fee Transm	nittal Form		Assignment Papers (for an Application)		After Allowance Communication to Group	
Fee A	Attached		Drawing(s)		Appeal Communication to Board of Appeals and Interferences	
Amendmen	at / Response		Licensing-related Papers		Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)	
Afte	r Final		Petition Routing Slip (PTO/SB/69) and Accompanying Petition		Proprietary Information	
Affic	davits/declaration(s)		Petition to Convert to a Provisional Application		Status Letter	
Extension of	of Time Request		Power of Attorney, Revocation Change of Correspondence Address	X	Additional Enclosure(s) (please identify below):	
Express Ab	andonment Request		Terminal Disclaimer		receipt acknowledgment postcard	
			Small Entity Statement			
	Disclosure Statement		Request for Refund			
Certified Coument(opy of Priority s)	Autho	rization to Charge Deposit Account charge Deposit Account No. 50-0893	for any	additional fees associated with	
	to Missing Parts/ Application	this pa	per or during the pendency of this applisideration of the documents enclosed.	ication	, including any extensions of time	
		Re	marks			
	ponse to Missing s under 37 CFR					
	2 or 1.53				•	
	SIGNATU	RE O	APPLICANT, ATTORNEY, OR	AGE	NT .	
Firm or Emily M. Haliday, Reg. No. 38,903, Quine Intellectual Property Law Group, P.C.					ty Law Group, P.C.	
Signature	Signature Signature					
Date	Date Selb. 11 2004					
		CF	RTIFICATE OF MAILING			

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Typed or printed name	Tracie Brooks			
Signature	hacie Brooks	Date	2-11-04	
<u> </u>				



I hereby certify that this correspondence is being deposited with the United States Postal Service first class mail in an envelope addressed to:

Commissioner for Patents, P.O. Box 1450

Alexandria, VA 22313-1450, on

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

By Tracie Brooks

Tracie Brooks

Attorney Docket No. 1012E-910001US Client Ref. No. SJK/BP6174346

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

RADEMACHER, Thomas William, et al.

Application No.: 10/666,511

Filed: September 17, 2003

For: MATERIALS AND METHODS

RELATING TO THE DIAGNOSIS AND TREATMENT OF DIABETES

AND OBESITY

Examiner: Unassigned

Art Unit: Unassigned

INFORMATION DISCLOSURE

STATEMENT UNDER 37 CFR § 1.97 and

§ 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The references cited on the attached PTO-1449 forms are being called to the attention of the Examiner to make of record references cited in parent application USSN 09/254,800 filed June 11, 1999. Pursuant to 37 CFR § 1.98(d), copies of references cited in parent application USSN 09/254,800 filed June 11, 1999 are not provided. However the applicants will gladly provide fresh copies of any references requested by the Examiner.

It is respectfully requested that the cited information on the attached 1449 form(s) be expressly considered during the prosecution of this application, and that references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

RADEMACHER, Thomas William, et al.

Application No.: 10/666,511

Page 2

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-0893. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Emily M. Haliday, J.D., Ph/D.

Reg. No. 38,903

QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.

P.O. BOX 458 Alameda, CA 94501

(510) 337-7871

Fax (510) 337-7877

Under the Paperwork Reduction Act of 1995, no persons	are required to respond to a collection of	information unless it contains a valid OMB control number.		
Substitute for form 1449A-B/PTO	Complete if Known			
	Application Number	10/666,511		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)	Filing Date	September 17, 2003		
TATEMENT BY APPLICANT	First Named Inventor	RADEMACHER, Thomas William		
	Group Art Unit	Unassigned		
8	Examiner Name	Unassigned		
(use as many sheets as necessary)	Attorney Docket Number	1012E-910001US		
	Date Submitted	February 11, 2004		
A.C.				

		U.S. Patent Doc		S. PATENT DOCUMENTS Name of Patentee or Applicant of	Date of Publication of	Pages, Columns, lines,
Examiner Initials	Cite No.	Number	Kind Code (if known)	Cited Document	Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appeal

FORt Foreign Patent Document					N PATENT DOCUMEN	Date of Publication	Pages, Columns, Lines,	Т
Examiner Initials	Cite No.	Office Number (if known)			Name of Patentee or Applicant of Cited Document	of Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	
								L
-				<u> </u>				\vdash
								╁
				-				╁
								╁

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
	1	The Merck Manual of Diagnosis and Therapy, 17 th Edition, Merck Research Laboratories, 1999, pages 165-171	
	-		

Examiner	Date	
Signature	 Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



COPY FROM PARENT

1012E-91000145 Attorney Docket No.: 21828-0705

FORM PTO-1449 (Modified)

LIST OF PATENTS AND PUBLICATIONS FOR

APPLICANT(S)' INFORMATION

ATTY. DOCKET NO.

21828-7855

10/2-9/000/U.S

10/666,5//

PE JC AP

O PE JC DIS

FEB 7 TOM SEU-

APPLICANT(S)' INFORMATION DISCLOSURE STATEMENT

Use several sheets if necessary)

APPLICANT Rodaris Pharmaceuticals Limited

Rademacher Group Limited
FILING DATE GROUP ART
June 11, 1999 1641

GROUP ART UNIT

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

EXAM'R INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	Subclass	Filing Date If Appropriate
	A1 ***	5,122,603	06/16/92	Larner et al.	536	18.7	
	A2	5,183,764	02/02/93	Kennington et al.	436	131	
-	A3	5,427,956	06/27/95	Kennington et al.	436	131	
	A4	5,750,348	05/12/98	Larner	435	7.1	-

FOREIGN PATENT DOCUMENTS

EXAM'R INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	Subclass	TRANSL	ATN
							yes	no
	B1 ***	WO 96/29425	09/26/96	PCT				
	B2 ***	0 532 915 A3	03/24/93	Europe				

OTHER ART (Include Author, Title, Date, Pertinent Pages, etc.)

C1	Alberti K.G.M.M. and Press, C.M. "The Biochemistry of the Complications of Diabetes Mellitus," Complications of Diabetes Eds Keen, H. and Jarret, J. Publishers Edward Arnold Ltd., London,
	pp. 231-270 (1982).
C2	Asplin, I. et al., "chiro-inositol Deficiency and Insulin Resistance: A Comparison of the chiro-Inositol-and the myo-Inositol-Containing Insulin Mediators Isolated from Urine, Hemodialysate, and Muscle of Control and Type II Diabetic Subjects," 90 Proc. Natl. Acad. Sci. 5924-5928 (1993).
C3	Baron, A., "The Coupling of Glucose Metabolism and Perfusion in Human Skeletal Muscle. The Potentia Role of Endothelium-Derived Nitric Oxide," 45 (Suppl. 1) <i>Diabetes</i> S105-S109 (1996).
C4	Bennett, P. et al., "Epidemiology and Natural History of NIDDM: Non-obese and Obese." In: International Textbook of Diabetes Mellitus, Eds. Alberti, K. et al. John Wiley & Sons Ltd., pp. 147-169 (1992).
C5	Brautigan, D., "Protein Phosphatases," 49 Recent Prog. Hormone Res. 197-214 (1994).
C6 ***	Caro, H.N. et al., "Isolation and partial characterisation of insulin-mimetic inositol phosphoglycans from human liver," 61 Biochemical and Molecular Medicine 214-228 (August 1997)
C7	Cohen, P., "The Structure and Regulation of Protein Phosphatases," 58 Annu. Rev. Biochem. 453-508 (1989).
C8	Craig, J. et al., "Chiroinositol Deficiency and Insulin Resistance," In: Molecular Biology of Diabetes. Part II, Eds. Draznin, B. and LeRoith, D., Humana Press Inc., Totowa, NJ, pp. 343-362 (1994).
С9	DeFronzo, R. et al., "Efficacy of Metformin in Patients with Non-Insulin-Dependent Diabetes Mellitus," 333(9) The New England Journal of Medicine 541-549 (1995).

COPY FROM PARENT

1012E-910001US

Attorney Docket No.: 21828-0705

Serial No. 10/666, 511

OTHER ART (Include Author, Title, Date, Pertinent Pages, etc.) [continued]

\c_		
al w	C10	DeFronzo, R. et al., "Pathogensis of NIDDM: A Balanced Overview," 15(3) Diabetes Care 318-368 (1992).
C. TOHO	C11	DeFronzo, R., "The Triumvirate: β-Cell, Muscle, Liver: A Collusion Responsible for NIDDM," 37 Diabetes 667-687 (1988).
AUS	C12	Farese, R. et al., "Insulin-Induced Activation of Glycerol-3-Phosphate Acyltransferase by <i>chiro</i> -Inositol-Containing Insulin Mediator is Defective in Adipocytes of Insulin Resistant, Type II Diabetic Goto-Kakizaki Rats," 91 <i>Proc. Natl. Acad. Sci.</i> 11040-11044 (1994).
	C13	Ferrannini, E., "Physiological and Metabolic Consequences of Obesity," 44(9) (Suppl. 3) Metabolism 15-17 (1995).
	C14	Fonteles, M.C. et al., "Infusion of pH 2.0 D-chiro inositol glycan insulin putative mediator normalizes plasma glucose in streptozotocin diabetic rats at a dose equivalent to insulin without inducing hypoglycaemia," <i>Diabetologia</i> 39:731-734 (1996).
	C15	Himsworth, H., "Diabetes Mellitus: Its Differentiation Into Insulin-Sensitive and Insulin-Insensitive Types," <i>The Lancet</i> 127-130 (1936).
	C16	Huang, L. et al., "Chiroinositol Deficiency and Insulin Resistance. III. Acute Glycogenic and Hypoglycemic Effects of Two Inositol Phosphoglycan Insulin Mediators in Normal and Streptozotocin-Diabetic Rats in Vivo," 132(2) Endocrinology 652-657 (1993).
	C17	Kennington, A. et al., "Low Urinary chiro-Inositol Excretion in Non-Insulin Dependent Diabetes Mellitus," 323(6) The New England Journal of Medicine 373-378 (1990).
	C18	Krentz, A. and Nattrass, M., "Insulin Resistance: A Multifaceted Metabolic Syndrome. Insights Gained Using a Low-Dose Insulin Infusion Technique," 13 Diabetic Medicine 30-39 (1996).
	C19	Kubota, M. et al., "Portal Insulin Delivery is Superior to Peripheral Delivery in Handling of Portally Delivered Glucose," 45(2) Metabolism 150-154 (1996).
_	C20	Kunjara, S. et al., "Tissue Specific Release of Inositol Phosphoglycans," In: <u>Biopolymers and Bioproducts:</u> Structure, Function, and Applications, J. Svast et al. (ed), Dokya Publications, pp. 301-306 (1995).
	C21	Larner, J. et al., "Insulin Mediators and the Control of Pyruvate Dehydrogenase Complex," 573 Annals New York Academy of Sciences 297-305 (1989).
	C22	Larner, J. et al., "Insulin Mediators: Structure and Formation," 53 Cold Spring Harbour Symposia on Quantitative Biology 965-971 (1988).
	C23	Lazar, D. et al., "Stimulation of Glycogen Synthesis by Insulin in Human Erythroleukemia Cells Requires the Synthesis of Glycosyl-Phosphatidylinositol," 91 Proc. Natl. Acad. Sci. 9665-9669 (1994).
	C24	Lilley, K. et al., "Insulin Mediator Stimulation of Pyruvate Dehydrogenase Phosphatases," 296(1) Archives of Biochemistry and Biophysics 170-174 (1992).
	C25	Machicao, F. et al., "Mannose, Glucosamine and Inositol Monophosphate Inhibit the Effects of Insulin on Lipogenesis. Further Evidence for a Role for Inositol Oligosaccharides in Insulin Action," 266 Biochem. J. 909-916 (1990).
	C26	Martiny, L. et al., "Control by Thyotropin of the Production by Thyroid Cells of an Inositol Phosphate-Glycan," 2(1) Cell Signalling 21-27 (1990).
	C27	Misek, D. and Saltiel, A., "An Inositol Phosphate Glycan Derived From a <i>Trypanosoma brucei</i> Glycosyl Phosphatidylinositol Promotes Protein Dephosphorylation in Rat Epididymal Adipocytes;" 135(5) <i>Endocrinology</i> 1869-1876 (1994).
	C28	Moller, D. and Flier, J.S., "Insulin Resistance - Mechanisms, Syndromes, and Implications," 325(13) The New England Journal of Medicine 938-948 (1991).
	C29	Moncada, S. and Higgs, A., "The L-Arginine-Nitric Oxide Pathway," 329(27) The New England Journal of Medicine 2002-2012 (1993).
	C30	Muller, G. et al., "The Sulphonylurea Drug, Glimepiride, Stimulates Release of Glycosylphosphatidylinositol-Anchored Plasma-Membrane Proteins from 3T3 Adipocytes," 289 <i>Biochem. J.</i> 509-521 (1993).

COPY FROM FIRENT

Attorney Docket No.: 21828-0705 Serial No. 10/666,511

OTHER ART (Include Author, Title, Date, Pertinent Pages, etc.) [continued]

2		
CO SINGER CO		Newman, J. et al., "Assay of Insulin Mediator Activity with Soluble Pyruvate Dehydrogenase Phosphatase," 116(5) Endocrinology 1912-1919 (1985).
§ C	-	O'Rahilly, S. and Moller, D., "Mutant Insulin Receptors in Syndromes of Insulin Resistance," 36 Clinical Endocrinology 121-132 (1992).
C		Ortmeyer, H. et al., "Chiroinositol Deficiency and Insulin Resistance. I. Urinary Excretion Rate of Chiroinositol is Directly Associated with Insulin Resistance in Spontaneously Diabetic Rhesus Monkeys," 132(2) Endocrinology 640-645 (1993).
· C		Ortmeyer, H. et al., "Chiroinositol Deficiency and Insulin Resistance. II. Acute Effects of D-Chiroinositol Administration in Streptozotocin-Diabetic Rats, Normal Rats Given a Glucose Load, and Spontaneously Insulin-Resistant Rhesus Monkeys," 132(2) <i>Endocrinology</i> 646-651 (1993).
	35***	Ortmeyer, H. et al., "In vivo D-chiroinositol activates skeletal muscle glycogen synthase and inactivates glycogen phosphorylase in rhesus monkeys," 6 Journal of Nutritional Biochemistry 499-503 (1995).
		Ostlund, R. et al., "D-chiro-Inositol Metabolism in Diabetes Mellitus," 90 Proc. Natl. Acad. Sci. 9988-9992 (1993).
C	-	Panzram, G., "Mortality and Survival in Type 2 (Non-Insulin-Dependent) Diabetes Mellitus," 30 Diabetologia 123-131 (1987).
С		Polonsky, K. et al., "Non-Insulin-Dependent Diabetes Mellitus - A Genetically Programmed Failure of the Beta Cell to Compensate for Insulin Resistance," 334(12) Seminars in Medicine of the Beth Israel Hospital, Boston 777-783 (1996).
C		Prochazka, M. et al., "Molecular and Linkage Analysis of Type-1 Protein Phosphatase Catalytic Beta- Subunit Gene: Lack of Evidence for its Major Role in Insulin Resistance in Pima Indians," 38 Diabetologia 461-466 (1995).
С		Rademacher, T. et al., "Inositolphosphoglycan Second Messengers," 27 Brazilian J. Med. Biol. 327-341 (1994).
С	• • •	Reaven, G. et al., "Hypertension and Associated Metabolic Abnormalities - The Role of Insulin Resistance and the Sympathoadrenal System," 334(6) The New England Journal of Medicine 374-381 (1996).
C	. –	Reaven, G., "Banting Lecture 1998. Role of Insulin Resistance in Human Disease," 37 Diabetes 1595-1607 (1988).
C		Reaven, G., "Pathophysiology of Insulin Resistance in Human Disease," 75(3) Physiological Reviews 473-486 (1995).
С		Rodbell, M., "Metabolism of Isolated Fat Cells," 239(2) The Journal of Biological Chemistry 375-380 (1964).
С	1	Romero, G. and Larner, J., "Insulin Mediators and the Mechanism of Insulin Action," 24 Advances in Pharmacology 21-50 (1993).
С		Romero, G. et al., "Anti-Inositolglycan Antibodies Selectively Block Some of the Actions of Insulin in Intact BC ₃ H1 Cells," 87 <i>Proc. Natl. Acad. Sci.</i> 1476-1480 (1990).
С		Romero, G. et al., "Phosphatidylinositol-Glycan Anchors of Membrane Proteins: Potential Precursors of Insulin Mediators," 240 Science 509-511 (1988).
С		Romero, G., "Inositolglycans and Cellular Signaling," 15 Cell Biology International Reports 827-852 (1991).
С		Saltiel, A. et al., "The Role of Glycosylphosphoinositides in Signal Transduction," 45 Recent Prog. Horm. Res. 353-382 (1989).
c		Sanchez-Arias, J. et al., "Impairment of Glycosyl-Phosphatidylinositol-Dependent Insulin Signaling System in Isolated Rat Hepatocytes by Streptozotocin-Induced Diabetes," 131(4) Endocrinology 1727-1733 (1992).
C	~ -	Serrano, J. et al., "Insulin Resistance: Cellular and Molecular Mechanisms," In: Recent Advances in Endocrinology and Metabolism, Vol. 4, pp. 167-183 (1992).

1012E-910001US
COPY FROM FRIENT Attorney Docket No.: 21828-0705
Sevial No. 10 | 666, 511

OTHER ART (Include Author, Title, Date, Pertinent Pages, etc.) [continued]

(PE)	6/		Sochor, M. et al., "Glucose Over- and Underutilization in Diabetes: Comparative Studies of the Change in
).			Activities of Enzymes of Glucose Metabolism in Rat Kidney and Liver," 7 Molecular Physiology 51-67
1 100	ं छ		(1985).
CEB 1.	5	000	Stumvoll, M. et al., "Metabolic Effects of Metformin in Non-Insulin-Dependent Diabetes Mellitus," 333(9)
_	<u>\$</u>		The New England Journal of Medicine 550-554 (1995).
FEB TRACE	C.		Suzuki, S et al., "Molecular Mechanism of Insulin Resistance in Spontaneous Diabetic GK (Goto-
CAN & INC.			Kakizaki) Rats," In: New Directions in Research and Clinical Works for Obesity and Diabetes Mellitus,
	i		Eds. Sakamoto, N., Angel, A., Hotta, N., pp. 197-203. Elsevier (1991).
_	k	C55	Suzuki, S. et al., "Urinary-chiro-Inositol Excretion is an Index Marker of Insulin Sensitivity in Japanese
			Type II Diabetes," 17(12) Diabetes Care 1465-1468 (1994).
-		C56	United Kingdom Prospective Diabetes Study, "United Kingdom Prospective Diabetes Study (UKPDS) 13:
			Relative Efficacy of Randomly Allocated Diet, Sulphonylurea, Insulin or Metformin in Patients with
			Newly Diagnosed Non-Insulin Dependent Diabetes Followed for Three Years," 310 BMJ 83-88 (1995).
_		C57***	Varese, R.V. et al., "Insulin-induced Activation of Glycerol 3-Phosphate Acyltransferase by chiro-
	İ		inositol-containing Insulin Mediator is Defective in Adipocytes of Insulin resistant, Type II Diabetic Goto-
			Kakizaki Rats," 91 <i>Proc. Natl. Acad. Sci.</i> 11040-11044 (1994).
_		C58	Villar-Palasi, C. and Farese, R., "Impaired Skeletal Muscle Glycogen Synthase Activation by Insulin in the
•			Goto-Kakizaki (G/K) Rat," 37 Diabetologia 885-888 (1994).
•		C59	Walker, M., "Obesity, Insulin Resistance, and Its Link to Non-Insulin-Dependent Diabetes Mellitus," 44(9)
			(Suppl. 3) Metabolism 18-20 (1995).
, – •		C60	Williams, B., "Insulin Resistance: The Shape of Things to Come," 344 The Lancet 521-524 (1994).
-	į	C61	Williams, R. and Palmer, J., "Farewell to Phenformin for Treating Diabetes Mellitus," 83(4) Annals of
			Internal Medicine 567-568 (1975).
=			

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference cons	sidered, whether or not citation is in conformance with MPEP 609; Draw line
through citation if not in conformance	e and not considered. Include copy of this form with next communication to
Applicant(s).	